

OCTOBER 10, 1921

Issued Weekly

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# AVIATION AND AIRCRAFT JOURNAL



The U.S.S. Alabama Keeling over under the Effect of a 2000-lb. Bomb

VOLUME XI

Number 15

## SPECIAL FEATURES

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Weight, dry with hub	200 lbs.	240 lbs.
Oil per H. P. hour	0.45 lbs.	0.50 lbs.
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NOTE: The power given is the mean rated power, many individual engine give higher power and lower consumption.



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LONG ISLAND

OCTOBER 10, 1921

# AVIATION AND AIRCRAFT JOURNAL

Member of the Audit Bureau of Circulations

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# AN AUTHORITY STATEMENT FROM A LEADING NEW YORK CITY NEWSPAPER ON THE MARKABLE RECORD OF AEROMARINE AIRWAYS PASSENGER SERVICE

Here is what the Editor of the New York Evening Mail had to say on the subject in a leading editorial printed in that newspaper on Friday, August 26, 1921.

## THE EVENING MAIL.

AUGUST 26 1921

### Fine Flying Over Fulton's Wake.

New York was the first port in America, if not in the world, to make commercial use of steam navigation. It is the first port in the country, also, to maintain successful regular airplane transportation over its harbor upon a considerable scale.

Fulton himself should receive consideration in the Aeromarine Airways, operating from the foot of West Eighty-second street, for the fine standard of schedule and safety it has maintained during its three months of passenger service this summer.

The official report of the Air Corps to the Bureau of Aeronautics of the Navy department shows that 2,800 passengers have been taken aloft by four flying boats, in total flights of 29,721 miles, with but one mishap and that of no serious nature. One of the boats had to make a forced landing during a storm. There were six persons in the craft at the time and none suffered so much as a scratch.

We may doubt if any trawler report of land salvage for this number of miles, tons and passengers could duplicate so high a record of freedom from "bumps of the road," unless the conveyance were upon rails. Certainly no highway vehicle operated at seventy miles per hour would perform as faithfully as these flying boats have done. The non-employment must have been won by a most successfully safe flight both of maintenance and pilot.

The Aeromarine Airways service has made a splendid demonstration in the direction of passenger, safe and economical air-flight commercial transportation over water which but little more than a century ago was agitated under the paddle-works of Fulton's ketch, standing Cleveland.

Two and a half years' experience in the New York Airways, the first commercial use of the motor-driven airplane, has not only benefited the public but also the industry of the port. It was a rich and poor side for the

### Civil War in

The country, the first commercial use of the motor-driven airplane, has not only benefited the public but also the industry of the port. It was a rich and poor side for the

It is well known in London, England, that the first commercial use of the motor-driven airplane, has not only benefited the public but also the industry of the port. It was a rich and poor side for the

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## Aeromarine Flying Boats

in the hands of operating companies are demonstrating daily the safety and profit of flying boat transportation.

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# AVIATION AND AIRCRAFT JOURNAL

LABELL D'UNY, EDITOR  
ALEXANDER KLEINER  
LEONARD F. WATSON  
RALPH H. LINDEN, CONTRIBUTING EDITOR

Vol. 32

OCTOBER 16, 1923

No. 25

### Facing the 40,000 Ft. Mark

THE altitude flight of Capt. John A. Macfadyen, A.R., which culminated in his passing the 40,000 ft. mark, is a performance which reflects the greatest credit on the pilot and on the technical men who were associated in the endeavor to make such a record possible.

The much abused Liberty engine and the supercharger, designed by Stanford A. Mason, with which it was fitted, share honors with Capt. George LePage of the French army, and the technical staff of McCook Field to whose joint plans the record-breaking airplane owes its existence. Considering that the machine was designed in its original form in 1918, and that it has undergone but minor changes since, the performance is the more remarkable.

The gluck and the endurance of Lieutenant Macfadyen, who made a number of high altitude flights before he finally succeeded in breaking Major Schneider's record, deserve the warmest praise. What a strain such a performance puts on the pilot's constitution may be gathered from Lieutenant Macfadyen's narrative which appears in this issue, and can be vouched for by those who have been up only one half that altitude.

### Progress in Soaring Flight

THE annual of the second German soaring competition which will be found in this issue affords considerable food for thought. That one of the competitors should have succeeded in flying without mechanical power a distance of six miles, in the course of which he rose some 300 ft. above his starting point, and even described a "figure eight," with nearly continuous the advance our airship crews have made in this comparatively unknown branch of aeronautics.

It is one of the curious facts that the Versailles peace treaty has proved, neither an obstacle nor a hindrance, but a beneficial stimulus to the German aviation industry, instead of being greeted with war machine, and perhaps by their conversion into peaceful commercial carriers, is able to go ahead with the development of purely civil types of aircraft. Our readers will be aware of the fact that they have not let this opportunity slip by. Further, the Allies put restrictions on the use, by the Germans, of aircraft engines built during the war which excluded a great horsepower. Again, as a result, the Germans were led to undertake the development of machines which would embody the greatest possible efficiency and at the same time the least handicap imposed by a limitation in horsepower.

Finally, the destruction of a large number of war-time aircraft engines, and the shortage of power plants which the International Commission of Aeronautical Control would approve for civil use, may be held, in part at least, responsible for

the deep interest German aeronautical circles are showing toward soaring flight.

It is significant that the soaring machines which displayed the best performance at the competition closely followed the lines of the low resistance cantilever monoplane with German production since the armistice. Hence it is hardly astonishing to hear, on the authority of Mr. Hansley Page, that in the case of one of these aircraft the  $L/D$  ratio for the whole machine is 18 : 1. It is obvious that if soaring flight is to be achieved beyond a few short hops, the machines must be at least as efficient, if not more so, than the best power driven airplanes.

While we do not believe that soaring machines are likely to displace airplanes as commercial carriers, and even less so as war machines, soaring experiments nevertheless afford an excellent opportunity for a more thorough study of the structure of the atmosphere, which can but benefit airplane design, and perhaps also piloting.

On the other hand it is quite conceivable that soaring machines fitted with an auxiliary power plant may in the near future afford an excellent platform, one which would have all the elements of real sport, and would have the advantage of being inexpensive. Such "auxiliary soaring" seems to us more likely to solve the problem of the aerial Ford than the much "flying beyond" which even in the hands of a trained athlete have a negligible performance in comparison with that achieved by the real soaring machines.

### The Omaha Aviation Meeting

THE aviation meeting which will be held on Nov. 2 to 5, next, at Omaha, Neb., promises to be one of the largest events of its kind ever held. The nucleus is the meeting of the Pulitzer Trophy race committee about a first prize drawing and will be joined in the meeting by the committee for the James A. Smith Efficiency Trophy, donated by John H. Lamm. The latter trophy, as its name indicates, is to go to the airplane embodying the greatest commercial efficiency, and for this reason it is of particular interest to operators of civil aircraft.

The importance of the Pulitzer Trophy race as a medium for bringing forth new high speed airplanes is obvious. The Army and the Navy have both constructed that machines for the event, but it is doubtful whether these machines will compete, as the General Staff, on the grounds of economy, has refused permission to do so, and this despite the fact that the organizers of the meeting offered to pay the shipping and spending expenses of the machines.

This attitude of the General Staff is highly deplorable, for a race is the best means for developing new high speed types, which are of the greatest importance for national defense.















## A Letter

The letter which follows was addressed by its writer to Ralph C. Duggan, Chicago, but as it indirectly also concerns AVIATION AND AIRCRAFT I believe the writer kindly supplied us with a copy of it. Content of my last news report shows, as it might only spoil the explosive nature of this letter.

Toronto, Oct. Sept. 20th, 1923

Mr. Ralph C. Duggan,  
140 North Dearborn St.,  
Chicago, Ill.

My dear Mr. Duggan—

I write with much interest your very available flying record made by your Great Intentionless Jaws. I have found the article of July, as noted on page 366 of AVIATION & AIRCRAFT, issue of Sept. 22th 1923.

The most striking feature of your statement is the fact that in order to accomplish same it would be necessary for the pilot in question to fly seven hours and twelve minutes per day, thirty days per month, to get in two hundred and eighty flying hours. It would be further necessary for him to control the direction of his flight in two point eighty-eight minutes to accomplish twenty-one hundred flights in two hundred and eighty hours.

It is safe to assume that it takes four minutes to bring the machine in after landing and transfer pupils. According to your figures eighty-seven flights are made per day by one pilot, covering four minutes for landing and changing pupil it would require five hours and forty-eight minutes.

From the foregoing it is obvious that the pilot would be in actual service seven hours and twelve minutes plus five hours and forty-eight minutes, which is a total of thirteen hours. Assuming that it is necessary for the pilot to sustain life it would be necessary for him to breathe of the breath of life three times per day, he would require about half an hour per meal, making a total of one hour and a half, this would then require fourteen hours and a half hours of the pilot's time.

Unless some other one machine is used by this particular pilot, it is evident that your machine is not subject to running repairs, inoperative, or even due to oil with gas and oil, and pilot with which I have come to find require all of these mechanical attributes.

Unless the pilot sleeps in the machine it would take him one hour each day to make his way home and return to the machine, in his uniform, and replacing of his clothes, pilot's time is now fifteen and half hours.

In most flying circles it is an acknowledged fact that a pilot should have a certain amount of recreation in order to keep him mentally efficient, the average workman under our democratic administration usually eight hours recreation and eight hours sleep. However since the pilot is a person he ought to be satisfied with four hours in which to perform his personal business and recreation.

This now accounts for sixteen and a half hours of his personal time and would leave him four and a half hours to visit the museum of slavery, and give his constitution a chance to repair the tissue of his weary body.

The odd day in July has been omitted in order that the pilot may rest on his laurels and offer up sincere thanksgiving to his benefactor that for his successful performance and interest has made for another flock of angels to carry him around for the rest of his life.

In closing we wish to compliment yourself, your pilot and publicity agent upon their valuable and strict adherence to the truth, insuring that imagination of your organization will not be in any way discouraged by this flattering article we wish to mention.

Yours in Doubt,

W. Leach  
Post U Z

P S

We forgot to mention the fact that as your pilot has the audacity to actually suffer away appreciatively alone and a half hour in sleep, we would release him and say to anyone who who does not want to spend his time so foolishly to 201 Indian Road, Toronto, Ontario



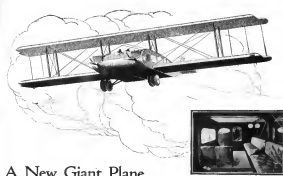
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Mr. Vincent Burnell, designer of the Airliner, writes:

"... The great aim of our plane necessarily caused us to believe that it would be difficult to locate shelter for it on the average flying field, and therefore it could be expected to experience considerable exposure. This required us to devote much forethought to the waterproofing necessary to prevent deterioration and failure of glue joints. We feel confident that in sleeping Valpar for our finishing material we have to the greatest possible degree obtained our aim. Our confidence is based on extensive previous experience in weather-proofing aircraft."

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### A Few of the Events

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#### STUNTING CONTEST

Three best planes will be picked for duels to be held on the following day. Absolutely no stunting to be done under an altitude of 1000 feet. \$600.00 Silver Cup for first place.

Looping Contests, Altitude Tests, Night Flights, Parachute Drops and scores of other events that will bring valuable Cash and Cup prizes to the winners.

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On November 1, 1932 *Aviation and Aeronautical Engineering* was combined with *Aircraft Journal* and published under the name of *Aviation and Aircraft Journal*. The above unbound volumes include *Aviation and Aircraft Journal* from its origin to the present time.

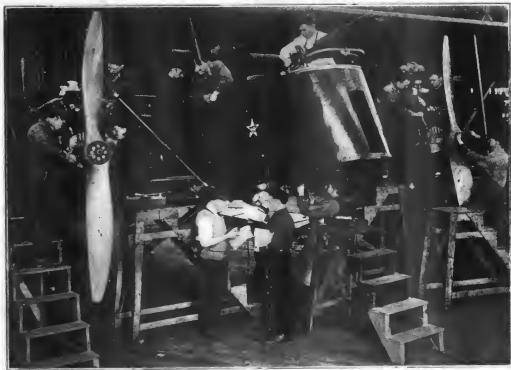
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